CLAIMS:

1. A piezoelectric sensor, comprising:

a transparent piezoelectric element having a piezoelectric property; and

a pair of transparent conductor film layers opposed to each other with the piezoelectric element therebetween,

the transparent piezoelectric element and the transparent conductor film layers being formed between a pair of transparent substrates, opposed to each other, which serve as pressure transmission means.

2. The piezoelectric sensor according to Claim 1, wherein said piezoelectric element is made of aluminum nitride or zinc oxide.

3. The piezoelectric sensor according to Claim 1 or 2, wherein said piezoelectric element has a thickness of 1 μm to 10 μm.

4. The piezoelectric sensor according to any one of Claims 1 to 3, wherein a further transparent conductor film layer is formed on one of the pair of transparent substrates so as to be positioned in a side opposite to the transparent conductor film layer.

5. A method of producing a piezoelectric sensor, comprising the steps of:

forming transparent conductor film layers respectively on a pair of transparent substrates;

forming a transparent piezoelectric element having a piezoelectric property so as to cover one of the transparent conductor film layers which has been formed on one of the pair of transparent substrates; and

bonding the piezoelectric element to the other of the transparent conductor film layers which has been formed on the other transparent substrate not provided with the piezoelectric element.

6. An input device, comprising a plurality of piezoelectric sensors each of which is the piezoelectric sensor according to any one of Claims 1 to 4.

7. A piezoelectric sensor, comprising pressure detection means which includes:

pressure transmission means for transmitting pressure; and

a piezoelectric element for receiving the pressure so as to convert the pressure into an electrical signal, the pressure being transmitted from the pressure

transmission means, said piezoelectric sensor being characterized in that

said piezoelectric element is made of a piezoelectric material having no Curie point and has a dipole orientation degree of not less than 75%.

8. The piezoelectric sensor according to Claim 7, wherein said piezoelectric element is made of a substance having a wurtzite structure.

9. The piezoelectric sensor according to Claim 8, wherein said piezoelectric element is made of aluminum nitride or zinc oxide.

10. The piezoelectric sensor according to any one of Claims 7 to 9, wherein said piezoelectric element is formed by a physical vapor deposition process.

11. The piezoelectric sensor according to any one of Claims 7 to 10, wherein said piezoelectric element has a thickness of 0.1 μm or more to 100 μm or less.

12. The piezoelectric sensor according to any one of Claims 7 to 11, wherein: said pressure transmission

means is constituted of a metal diaphragm, and said pressure detection means is formed by providing a piezoelectric element on a surface of the metal diaphragm.

13. The piezoelectric sensor according to any one of Claims 7 to 12, further comprising a main metal body for mounting said pressure detection means on an internal-combustion cylinder, the main metal body having an axial hollow for connecting an inside of the cylinder with an outside of the cylinder, said pressure detection means being provided in the axial hollow.

14. The piezoelectric sensor according to any one of Claims 7 to 11, wherein:

said pressure transmission means is a substrate, and

a first conductor film layer, said piezoelectric element, and a second conductor film layer are laminated on a surface of the pressure transmission means in this order.

15. The piezoelectric sensor according to Claim 14, wherein said substrate is an insulative substrate made of an oxide, carbide, nitride, or boride ceramic sintered body

or quartz glass.

16. The piezoelectric sensor according to Claim 14, wherein said substrate is a conductive substrate made of a heat-resistant metal material.

17. The piezoelectric sensor according to any one of Claims 14 to 16, wherein said first conductor film layer has a surface, being in contact with the piezoelectric sensor, which is coated with a metal contained in the piezoelectric sensor.

18. The piezoelectric sensor according to any one of Claims 14 to 17, wherein said second conductor film layer is divided into two or more.